VOLUME 25, PART II

SUBJECT INDEX

A

Abrasion.
Mortar abrasion test, 223.
The Significance of the Common Test Methods for Determining the Strength of Mortars. J. W. Gowen and H. W. Leavitt, 218. Discussion, 228.

Absorption.
Brick. D. K. Boyd, 315. Discussion, 326.

Aggregates.
Analytical Properties of Set and Hardened Mortars. E. E. Butterfield, 283. Discussion, 292.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures. Prévost Hubbard and F. C. Field, 335.

Alloys.
A Note on the Microstructure of Aluminum-Iron Alloys of High Purity. E. H. Dix, Jr., 120. Discussion, 130.
Some Fatigue Tests on Non-Ferrous Metals. R. R. Moore, 66. Discussion, 84.

Alloy Steel.
Fatigue of Metals by Direct Stress. P. L. Irwin, 53. Discussion, 64.
The Tensile Properties of Metals at High Temperatures. T. D. Lynch, N. L. Mochel and P. G. McVetty, 5.

Aluminum.
Accelerated Corrosion Tests on Bare Overhead Electrical Conductors. F. F. Fowle, 137. Discussion, 153.
Comparative corrosion data on aluminum alloys, 166.
A Note on the Microstructure of Aluminum-Iron Alloys of High Purity. E. H. Dix, Jr., 120. Discussion, 130.
Physical properties of non-ferrous metals, 69.
Some Fatigue Tests on Non-Ferrous Metals. R. R. Moore, 66. Discussion, 84.

Asphalt.
A Deformation Test for Asphaltic Mixtures. H. M. Milburn, 356.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures. Prévost Hubbard and F. C. Field, 335.
A Stability Test for Bituminous Paving Mixtures. W. J. Emmons and B. A. Anderton, 346.

B

Bituminous Materials.
A Deformation Test for Asphaltic Mixtures. H. M. Milburn, 356.
Discussion on stability of bituminous paving mixtures, 365.

VOLUME 25, PART II

SUBJECT INDEX

A

Abrasion.
Mortar abrasion test, 223.
The Significance of the Common Test Methods for Determining the Strength of Mortars. J. W. Gowen and H. W. Leavitt, 218. Discussion, 228.

Absorption.
Brick. D. K. Boyd, 315. Discussion, 326.

Aggregates.
Analytical Properties of Set and Hardened Mortars. E. E. Butterfield, 283. Discussion, 292.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures. Prévost Hubbard and F. C. Field, 335.

Alloys.
A Note on the Microstructure of Aluminum-Iron Alloys of High Purity. E. H. Dix, Jr., 120. Discussion, 130.
Some Fatigue Tests on Non-Ferrous Metals. R. R. Moore, 66. Discussion, 84.

Alloy Steel.
Fatigue of Metals by Direct Stress. P. L. Irwin, 53. Discussion, 64.
The Tensile Properties of Metals at High Temperatures. T. D. Lynch, N. L. Mochel and P. G. McVetty, 5.

Aluminum.
Accelerated Corrosion Tests on Bare Overhead Electrical Conductors. F. F. Fowle, 137. Discussion, 153.
Comparative corrosion data on aluminum alloys, 166.
A Note on the Microstructure of Aluminum-Iron Alloys of High Purity. E. H. Dix, Jr., 120. Discussion, 130.
Physical properties of non-ferrous metals, 69.
Some Fatigue Tests on Non-Ferrous Metals. R. R. Moore, 66. Discussion, 84.

Asphalt.
A Deformation Test for Asphaltic Mixtures. H. M. Milburn, 356.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures. Prévost Hubbard and F. C. Field, 335.
A Stability Test for Bituminous Paving Mixtures. W. J. Emmons and B. A. Anderton, 346.

B

Bituminous Materials.
A Deformation Test for Asphaltic Mixtures. H. M. Milburn, 356.
Discussion on stability of bituminous paving mixtures, 365.

Effect of filler on stability of natural sand mixtures with 10 per cent of added asphalt, 343.
Machine for the Determination of the Pliability of Prepared Roofing and the Breaking Point of Bitumen. C. S. Reeve and F. W. Yeager, 385. Discussion, 390.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures. Prévost Hubbard and F. C. Field, 335.
Quality of Oil for Surface Oiling of Earth Roads and Streets. F. L. Sperry, 376.
Relation between voids and strength; gravel asphaltic concrete, 355.
Relation between voids and strength with changes in bitumen; sheet asphalt, 352.
Relation between voids and strength with changes in bitumen; stone asphaltic concrete, 354.
Relation between voids and strength with changes in filler; sheet asphalt, 353.
A Stability Test for Bituminous Paving Mixtures. W. J. Emmons and B. A. Anderton, 346.

Brass.

Physical properties of non-ferrous metals, 69.
Some Fatigue Tests on Non-Ferrous Metals. R. R. Moore, 66. Discussion, 84.

Brick.

Brick. D. K. Boyd, 315. Discussion, 326.
Influence of the strength of mortar on piers, 324.

Bronze.

Fatigue of Metals by Direct Stress. P. L. Irwin, 53. Discussion, 64.
The Tensile Properties of Metals at High Temperatures. T. D. Lynch, N. L. Mochel and P. G. McVetty, 5.

C

Cast Iron.

Typical Static and Fatigue Tests on Steel at Elevated Temperatures. T. McL. Jasper, 27.

Cement.

Comparative tests of high-alumina and portland cements, 193.
Discussion on cement testing, 177.
Requirements of Cement for Modern Highway Construction. A. T. Goldbeck, 169. Discussion, 177.
A Study of Temperatures in High-Alumina Cement and Methods of Curing. H. S. Mattimore, 192. Discussion, 198.

Cold Working.

Softening of Hard-Rolled Electrolytic Copper. N. B. Pilling and G. P. Halliwell, 97.

Color.

Tests for Hardness, Gloss, Color and Leveling of Varnishes. A. H. Pfund, 392. Discussion, 403.

Compression Testing.

A Deformation Test for Asphaltic Mixtures. H. M. Milburn, 356.
Discussion on concrete compression test specimens, 251.
Discussion on stability of bituminous paving mixtures, 365.
Effect of Size and Shape of Test Specimen on Compressive Strength of Concrete. H. F. Gonnerman, 237. Discussion, 251.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures. Prévost Hubbard and F. C. Field, 335.
Relation between tension, transverse and compression tests of mortars at various ages, 230.
The Significance of the Common Test Methods for Determining the Strength of Mortars. J. W. Gowen and H. W. Leavitt, 218. Discussion, 228.
A Stability Test for Bituminous Paving Mixtures. W. J. Emmons and B. A. Anderton, 346.

Concrete.

Analytical Properties of Set and Hardened Mortars. E. E. Butterfield, 283. Discussion, 292.
Chemical analysis of mortars, 286.
Comparison of flexural and compressive strength of concrete, 189.
Discussion on bond between concrete and steel, 273.
Discussion on concrete compression test specimens, 251.
Discussion on curing of concrete, 198.
Discussion on testing consistency of concrete, 213.
Effect of age on compressive strength of concrete, 247.
Effect of Size and Shape of Test Specimen on Compressive Strength of Concrete. H. F. Gonnerman, 237. Discussion, 251.
Effect on bond of replacing cement with hydrated lime, 270.
A New Test for Consistency of Paving Concrete. F. H. Jackson and George Werner, 204. Discussion, 213.
Relation of voids in mortar to ratio of sand to cement for mortar of various water content, 293.
The Significance of the Common Test Methods for Determining the Strength of Mortars. J. W. Gowen and H. W. Leavitt, 218. Discussion, 228.
Studies of Bond Between Concrete and Steel. D. A. Abrams, 256. Discussion, 273.
A Study of Temperatures in High-Alumina Cement and Methods of Curing. H. S. Mattimore, 192. Discussion, 198.

Consistency.

Discussion on testing consistency of concrete, 213.
A New Test for Consistency of Paving Concrete. F. H. Jackson and George Werner, 204. Discussion, 213.

Copper.

Accelerated Corrosion Tests on Bare Overhead Electrical Conductors. F. F. Fowle, 137. Discussion, 153.
Softening of Hard-Rolled Electrolytic Copper. N. B. Pilling and G. P. Halliwell, 97.

Corrosion.
Accelerated Corrosion Tests on Bare Overhead Electrical Conductors. F. F. Fowle, 137. Discussion, 153.
Comparative corrosion data on aluminum alloys, 166.
Discussion on accelerated corrosion tests, 153.
Discussion on evaluation of corrosion tests, 161.
Effect of corrosion on physical properties, 158.
The Evaluation of Corrosion Tests. E. Blough, 156. Discussion, 161.

F

Fatigue Testing.
Comparison of effect of notch on endurance limit with elongation of material, 78.
Fatigue of Metals by Direct Stress. P. L. Irwin, 53. Discussion, 64.
References on fatigue testing, 83.
Some Fatigue Tests on Non-Ferrous Metals. R. R. Moore, 66. Discussion, 84.
Typical Static and Fatigue Tests on Steel at Elevated Temperatures. T. McL. Jasper, 27.

Fire Tests.
The Fire Resistance of Gypsum Partitions. S. H. Ingberg, 299.

Flexure Testing.
Comparison of flexural and compressive strength of concrete, 189.
Relation between tension, transverse and compression tests of mortars at various ages, 230.

G

Gloss.
Tests for Hardness, Gloss, Color and Leveling of Varnishes. A. H. Pfund, 392. Discussion, 403.

Gypsum.
The Fire Resistance of Gypsum Partitions. S. H. Ingberg, 299.
Strength, absorption and weight of gypsum block, 300.

H

Hardness.
Tests for Hardness, Gloss, Color and Leveling of Varnishes. A. H. Pfund, 392. Discussion, 403.

Heat Treatment.
Softening of Hard-Rolled Electrolytic Copper. N. B. Pilling and G. P. Halliwell, 97.

High Temperature.
Discussion on Properties of Metals at Elevated Temperatures, 33.
The Tensile Properties of Metals at High Temperatures. T. D. Lynch, N. L. Mochel and P. G. McVetty, 5.
Typical Static and Fatigue Tests on Steel at Elevated Temperatures. T. McL. Jasper, 27.

I

Iron.

Accelerated Corrosion Tests on Bare Overhead Electrical Conductors. F. F. Fowle, 137. Discussion, 153.

A Note on the Microstructure of Aluminum-Iron Alloys of High Purity. E. H. Dix, Jr., 120. Discussion, 130.

L

Laboratory.

The Design of a Research Laboratory for a Textile Manufacturing Plant. G. B. Haven, 416.

Lime.

Effect on bond of replacing cement with hydrated lime, 270.

Long-Time Tests.

Discussion on Properties of Metals at Elevated Temperatures, 33.

The Tensile Properties of Metals at High Temperatures. T. D. Lynch, N. L. Mochel and P. G. McVetty, 5.

M

Magnesium.

Physical properties of non-ferrous metals, 69.

Some Fatigue Tests on Non-Ferrous Metals. R. R. Moore, 66. Discussion, 84.

Metallography.

A Note on the Microstructure of Aluminum-Iron Alloys of High Purity. E. H. Dix, Jr., 120. Discussion, 130.

Mortar.

Analytical Properties of Set and Hardened Mortars. E. E. Butterfield, 283. Discussion, 292.

Chemical analysis of mortars, 286.

Influence of the strength of mortar on piers, 324.

Mortar abrasion test, 223.

Relation between tension, transverse and compression tests of mortars at various ages, 230.

Relation of voids in mortar to ratio of sand to cement for mortar of various water content, 293.

The Significance of the Common Test Methods for Determining the Strength of Mortars. J. W. Gowen and H. W. Leavitt, 218. Discussion, 228.

O

Oil.

Physical and chemical characteristics of road oils, 378.

Quality of Oil for Surface Oiling of Earth Roads and Streets. F. L. Sperry, 376.

P

Paint.

A Recording Drying-Time Meter for Varnishes and Similar Materials. J. McE. Sanderson, 407.

Tests for Hardness, Gloss, Color and Leveling of Varnishes. A. H. Pfund, 392. Discussion, 403.

R

Research.

The Design of a Research Laboratory for a Textile Manufacturing Plant. G. B. Haven, 416.

Road Material.

A Deformation Test for Asphaltic Mixtures. H. M. Milburn, 356.

Discussion on stability of bituminous paving mixtures, 365.

Effect of filler on stability of natural sand mixtures with 10 per cent of added asphalt, 343.

Effect of filler on stability of natural sand mixtures with 10 per cent of castor oil, 344.

A New Test for Consistency of Paving Concrete. F. H. Jackson and George Werner, 204. Discussion, 213.

Physical and chemical characteristics of road oils used in Illinois experiments, 378.

A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures. Prévost Hubbard and F. C. Field, 335.

Quality of Oil for Surface Oiling of Earth Roads and Streets. F. L. Sperry, 376.

Relation between voids and strength; gravel asphaltic concrete, 355.

Relation between voids and strength with changes in bitumen; sheet asphalt, 352.

Relation between voids and strength with changes in bitumen; stone asphaltic concrete, 354.

Relation between voids and strength with changes in filler; sheet asphalt, 353.

Requirements of Cement for Modern Highway Construction. A. T. Goldbeck, 169. Discussion, 177.

A Stability Test for Bituminous Paving Mixtures. W. J. Emmons and B. A. Anderton, 346.

A Study of Temperatures in High-Alumina Cement and Methods of Curing. H. S. Mattimore, 192. Discussion, 198.

Roofing.

Machine for the Determination of the Pliability of Prepared Roofing and the Breaking Point of Bitumen. C. S. Reeve and F. W. Yeager, 385. Discussion, 390.

S

Specifications.

Brick. D. K. Boyd, 315. Discussion, 326.

Outline of treatise on specifications, 440.

The Purchase of Materials on Specifications. Dean Harvey, 425. Discussion, 434.

Steel.

Accelerated Corrosion Tests on Bare Overhead Electrical Conductors. F. F. Fowle, 137. Discussion, 153.

Discussion on properties of metals at elevated temperatures, 33.

Fatigue of Metals by Direct Stress. P. L. Irwin, 53. Discussion, 64.

Studies of Bond Between Concrete and Steel. D. A. Abrams, 256. Discussion, 273.

The Tensile Properties of Metals at High Temperatures. T. D. Lynch, N. L. Mochel and P. G. McVetty, 5.
Typical Static and Fatigue Tests on Steel at Elevated Temperatures. T. McL. Jasper, 27.

T

Testing Apparatus.
The Design of a Research Laboratory for a Textile Manufacturing Plant. G. B. Haven, 416.
A Recording Drying-Time Meter for Varnishes and Similar Materials. J. McE. Sanderson, 407.
Tests for Hardness, Gloss, Color and Leveling of Varnishes. A. H. Pfund, 392. Discussion, 403.

Testing, Methods of.
Effect of Size and Shape of Test Specimen on Compressive Strength of Concrete. H. F. Gonnerman, 237. Discussion, 251.
The Significance of the Common Test Methods for Determining the Strength of Mortars. J. W. Gowen and H. W. Leavitt, 218. Discussion, 228.

Textiles.
The Design of a Research Laboratory for a Textile Manufacturing Plant. G. B. Haven, 416.

V

Varnish.
A Recording Drying-Time Meter for Varnishes and Similar Materials. J. McE. Sanderson, 407.
Tests for Hardness, Gloss, Color and Leveling of Varnishes. A. H. Pfund, 392. Discussion, 403.

W

Wire.
Accelerated Corrosion Tests on Bare Overhead Electrical Conductors. F. F. Fowle, 137. Discussion, 153.

AUTHOR INDEX

A

Abrams, D. A.
Studies of Bond Between Concrete and Steel, 256.
Discussion, 185, 189, 279.

Adams, W. C.
Discussion, 390.

Anderton, B. A.
A Stability Test for Bituminous Paving Mixtures, 346.
Discussion, 373.

Ashton, Ernest.
Discussion, 214.

B

Blough, E.
The Evaluation of Corrosion Tests, 156.
Discussion, 162.

Boyd, D. K.
Brick, 315.
Discussion, 328, 334, 438.

Bragg, J. G.
Discussion, 177, 188.

Breyer, F. G.
Discussion, 153, 154, 164.

Butterfield, E. E.
Analytical Properties of Set and Hardened Mortars, 283.
Discussion, 251, 298.

C

Capp, J. A.
Discussion, 439.

Carver, William.
Discussion, 332.

Clemmer, H. F.
Discussion, 179.

Conwell, E. L.
Discussion, 198.

Crum, R. W.
Discussion, 273.

D

Dix, E. H., Jr.
A Note on the Microstructure of Aluminum-Iron Alloys of High Purity, 120.
Discussion, 131, 135.

E

Emmons, W. J.
A Stability Test for Bituminous Paving Mixtures, 346.

F

Field, F. C.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures, 335.

Fitch, T. A.
Discussion, 188, 375.

Fowle, F. F.
Accelerated Corrosion Tests on Bare Overhead Electrical Conductors, 137.
Discussion, 155.

Freeman, P. J.
Discussion, 202.

French, H. J.
Discussion, 34.

Fulweiler, W. H.
Discussion, 439.

G

Gilkey, H. J.
Discussion, 214.

Goldbeck, A. T.
Requirements of Cement for Modern Highway Construction, 169.
Discussion, 189.

Gonnerman, H. F.
Effect of Size and Shape of Test Specimen on Compressive Strength of Concrete, 237.
Discussion, 253.

Gowen, J. W.
The Significance of the Common Test Methods for Determining the Strength of Mortars, 218.
Discussion, 235.

Gushee, E. T.
Discussion, 434.

H

Halliwell, G. P.
Softening of Hard-Rolled Electrolytic Copper, 97.

Harvey, Dean.
The Purchase of Materials on Specification, 425.

Haven, G. B.
The Design of a Research Laboratory for a Textile Manufacturing Plant, 416.

Herschel, W. H.
Discussion, 216, 217.

Howe, H. L., Jr.
Discussion, 371.

Hubbard, Prévost.
A Practical Method for Determining the Relative Stability of Fine-Aggregate Asphalt Paving Mixtures, 335.
Discussion, 373.

Hutchinson, G. W.
Discussion, 230, 278.

I

Ingberg, S. H.
The Fire Resistance of Gypsum Partitions, 299.
Discussion, 214, 331.

Irwin, P. L.
Fatigue of Metals by Direct Stress, 53.
Discussion, 65.

J

Jackson, F. H.
A New Test for Consistency of Paving Concrete, 204.
Discussion, 214, 216.

Jasper, T. McL.
Typical Static and Fatigue Tests on Steel at Elevated Temperatures, 27.
Discussion, 41, 50.

Job, Robert.
Discussion, 162, 164.

Johnson, N. C.
Discussion, 185.

K

Kern, L. E.
Discussion, 437.

Koch, W. C.
Discussion, 327.

L

Lawson, T. R.
Discussion, 326, 330.

Leavitt, H. W.
The Significance of the Common Test Methods for Determining the Strength of Mortars, 218.
Discussion, 234, 235.

Levison, A. A.
Discussion, 215.

Little, W. F.
Discussion, 404.

Lynch, T. D.
The Tensile Properties of Metals at High Temperatures, 5.
Discussion, 40, 48.

M

MacKenzie, J. T.
Discussion, 162.

Malcolm, V. T.
Discussion, 43.

Mattimore, H. S.
A Study of Temperatures in High-Alumina Cement and Methods of Curing, 192.
Discussion, 181, 203.

McAdam, D. J.
Discussion, 84, 130, 132.

McKay, R. J.
Discussion, 154.

McKesson, C. L.
Discussion, 181.

McVetty, P. G.
The Tensile Properties of Metals at High Temperatures, 5.
Discussion, 48.

Merriman, Thaddeus.
Discussion, 183, 191, 201.

Milburn, H. M.
A Deformation Test for Asphaltic Mixtures, 356.

Miner, J. L.
Discussion, 200.

Mochel, N. L.
The Tensile Properties of Metals at High Temperatures, 5.
Discussion, 48.

Moore, H. F.
Discussion, 64.

Moore, R. R.
Some Fatigue Tests on Non-Ferrous Metals, 66.
Discussion, 90.

Myers, Bert.
Discussion, 273.

N

Nelson, H. A.
Discussion, 403.

P

Perkins, G. H.
Discussion, 371, 374.

Pfund, A. H.
Tests for Hardness, Gloss, Color and Leveling of Varnishes, 392.
Discussion, 403, 404.

Pierce, W. M.
Discussion, 163.

Pilling, N. B.
Softening of Hard-Rolled Electrolytic Copper, 97.

Proudley, C. E.
Discussion, 228.

R

Randall, T. A.
Discussion, 330.

Rawdon, H. S.
Discussion, 153, 163.

Reeve, C. S.
Machine for the Determination of the Pliability of Prepared Roofing and the Breaking Point of Bitumen, 385.
Discussion, 391.

Richart, F. E.
Discussion, 292.

S

Sanderson, J. McE.
A Recording Drying-Time Meter for Varnishes and Similar Materials, 407.

Sayre, M. F.
Discussion, 165.

Schmutz, F. C.
Discussion, 405.

Slater, W. A.
Discussion, 213, 216, 276.

Smith, E. B.
Discussion, 273.

Smith, F. P.
Discussion, 370, 375.

Speller, F. N.
Discussion, 162.

Sperry, F. L.
Quality of Oil for Surface Oiling of Earth Roads and Streets, 376.

Steele, C. H.
Discussion, 436.

T

Talbot, A. N.
Discussion, 332.

Templin, R. L.
Discussion, 95.

Thum, E. E.
Discussion, 161.

U

Ulman, M. H.
Discussion, 365, 373.

V

Viens, E.
Discussion, 332.

W

Werner, George.
A New Test for Consistency of Paving Concrete, 204.

Wig, R. J.
Discussion, 216.

Wood, J. K.
Discussion, 33.

Woolson, I. H.
Discussion, 328, 331.

Y

Yeager, F. W.
Machine for the Determination of the Pliability of Prepared Roofing and the Breaking Point of Bitumen, 385.
Discussion, 391.

Young, R. B.
Discussion, 191.